

## ACCOUNT STATUS SYSTEM AND METHOD

### Field

The present application relates to an account management system and method and, more particularly, to a system and method that provides users via automated messages information about the status of their accounts.

### Background

Voice response units are used in a variety of applications today to resolve customer problems and questions in conjunction with customer service representatives. In a financial service industry, such voice response units often provide users general information via one or more automated messages. Usually, the user is also given the option to either bypass an automated message or after the automated message has concluded to interact with a customer service representative in order to receive more detailed information tailored to an account of the user.

For example, a user may request to close an account, for example, with a credit card company. Thereafter, the user may contact the credit card company to confirm that an account is closed or when an account will close if the account has not been closed. The user receives very little information, if any, from automated messages, but rather must speak with a customer

service representative to receive information about the status  
of the account that was previously requested to be closed. As a  
result, since such users would rather speak with a customer  
service representative because the information provided via  
5 automated messages is not sufficient and/or because of lack of  
patience navigating through several automated messages to find  
out the necessary information, there is an overload of calls  
that must be serviced by customer service representatives.  
Consequently, companies, such as credit card companies, incur  
10 tremendous expenses in having to handle these calls with  
customer service representatives, as opposed to having the calls  
handled solely through the voice response unit. For example,  
millions of customer service calls a year are to inquire about  
an account previously requested to be closed and it cost  
15 companies millions of dollars to handle these calls.  
Specifically, many of these calls will be to confirm that an  
account is closed, identify when an account will close if the  
account is not closed already, check the status of a refund  
check and/or to inquire about automatic charges posting to an  
20 account.

Accordingly, a need exist for an automated system and  
method whereby the number of calls to customer service  
representatives are mitigated due to detailed information being

provided to a user via automated messages regarding the status  
of an account that was requested to be closed by the user. More  
particularly, there is a need for an automated system and method  
that automatically identifies that a user is calling about an  
5 account that was requested to be closed and for providing to  
that user via automated messages account status information  
tailored to the closing account.

### Summary Of The Invention

10 An aspect of the present application provides for a method  
for managing a closing of an account of a user. The method  
includes receiving an identifier of the account of the user,  
retrieving status information associated with the identifier,  
determining from the retrieved status information whether the  
15 account is coded to close, and automatically providing from the  
retrieved status information a reason why the account has not  
been closed if the account is determined to be coded to close.

Another aspect of the present application provides for an  
account management system for managing a closing of an account  
20 of a user, including a memory unit for storing status  
information of the account, a response unit connected to the  
memory unit and operable to receive an identifier of the  
account, and a determination unit connected to the response unit

and operable to receive the identifier from the response unit  
and to retrieve the status information associated with the  
identifier from the memory unit, the determination unit further  
operable to determine whether the account is coded to close from  
5 the retrieved status information, and to automatically provide  
through the response unit a message indicating a reason why the  
account has not been closed if the account is determined to be  
coded to close.

A further aspect of the present application provides for a  
10 method for informing a user of a status of an account. The  
method includes receiving from the user an account identifier,  
retrieving status information associated with a closing of the  
account according to the received account identifier,  
determining from the retrieved status information whether the  
15 account has been closed, and if the account has not been closed,  
whether a refund is owed to the user on the account and whether  
a security deposit will be or was applied to the account,  
determining a date the account will close if it was determined  
that the account is not closed, determining a date the user will  
20 receive the refund if it was determined that the refund is owed  
to the user, determining a date the security deposit will be  
applied to the account if it was determined that the security  
deposit was not applied to the account, and automatically

providing to the user from the retrieved status information a voice message indicating at least one of the date the account will close, the date the user will receive the refund and the date the security deposit will be applied to the account.

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### **Brief Description of the Drawings**

Fig. 1 illustrates an exemplary embodiment of an automated account status system of the present application;

Fig. 2 illustrates an exemplary flow diagram when an account balance is less than or equal to zero dollars and a user has requested that the account be closed; and

Fig. 3 illustrates an exemplary flow diagram when an account balance is greater than zero dollars and a user has requested that the account be closed.

### **Detailed Description**

The exemplary embodiments of the present application are explained with reference to a user requesting to close a credit card account and thereafter contacting the credit card company for information regarding the account requested to be closed. The present application, however, is not limited to credit card accounts and credit card companies, rather, other accounts

managed or owned by various companies can be requested to be closed by a user.

In Fig. 1, an exemplary automated account status system 100 is shown. Account status system 100 includes one or more users 105a...105n coupled to response unit 110 and determination unit 115 coupled to one or more memory units 120 and to response unit 110. In an exemplary embodiment, users 105a...105n are individuals using communication devices, such as a wired or wireless telephones and/or network connections, for example, Internet connections, via a wireless or wired transmission link to transmit information to and to receive information from response unit 110. Other communication devices can be used by users 105a...105n as well. Further, memory unit 120 can include various types of memory storage devices, for example, one or more databases. Memory unit 120 can store, for example, status information related to accounts. The components of Fig. 1 may be implemented through hardware, software, and/or firmware. The number of components in account status system 100 is not limited to what is illustrated.

Figs. 2 and 3 illustrate exemplary flow diagrams whereby status information is provided to a user via one or more automated messages after the user has requested that a credit card account be closed. Specifically, Fig. 2 sets forth an

exemplary flow diagram when a balance of a credit card account is less than or equal to zero dollars and Fig. 3 sets forth an exemplary flow diagram when a balance of a credit card account is greater than zero.

5           A user, such as one of users 105a...105n shown in Fig. 1, first requests to close a credit card account, for example, by telephoning a credit card company and verbally informing a customer service representative from the credit card company or sending a request to close via mail or via e-mail to the credit  
10 card company. Response unit 110 receives information, for example, from a customer service representative, indicating that the user has requested to close the account and stores the information in memory unit 120, in 205, as shown in Fig. 2.

          Thereafter, the user again contacts the credit card  
15 company, for example, by telephoning the credit card company via a 1(800) number, and inputs an identifier, such as an account number, associated with the account, for example, using a telephone key pad in order to inquire about the status of the previous request to close the account. Specifically, the user  
20 may desire status information regarding whether the account has already been closed, if the account has not been closed, what is the reason or reasons for the account not being closed and how does the user rectify the reason(s), and/or whether a refund

check was or will be sent to the user. In an exemplary embodiment, the status information is provided to the user via response unit 110 using one or more automated messages. The automated messages can be voice messages and/or text messages.

5        Response unit 110 receives information including the account number input by the user, in 210. Determination unit 115 coupled to response unit 110 then determines whether the account is coded to close or has already been closed based on at least the inputted account number associated with the account and information stored in memory unit 120, in 215. In the present application, an account being coded to close means that an account is pending a closing date after receiving a request to close the account. For example, an account can be pending a closing date because an outstanding balance of the account must be paid and/or a confirmation is needed that no additional charges are being put on the account. If determination unit 115 determines that the account has been closed, in 215, another determination is made by determination unit 115 whether a refund payment is to be sent to the user, in 240. If a refund payment is to be sent to the user, response unit 110 provides status information to the user via one or more automated messages including information indicating that the account has been closed, the date the user should receive the refund payment by



and/or the amount of the refund payment, in 260. In an exemplary embodiment, the date is calculated by determination unit 115 by adding a predetermined number of days, for example, thirty days, to the date the account was coded to close by the credit card company and the account had a balance of zero dollars. The date can be calculated in variety of ways as well. Further, other information can be provided to the user via one or more automated messages, such as an option to reopen an account, access status information about another account, balance and payment information, payment address information, recent transaction information, available credit information, statement request information, information about lost/stolen credit cards, payment options information, earned interest information and/or deposit information, in 265. In the exemplary embodiments of the present application, a user can choose which if any of the information the user wants to hear about, for example, by pressing an appropriate key on a telephone key pad. If a refund payment is not due, in 240, response unit 110 provides status information to the user via one or more automated messages including an automated message indicating that the account is closed and other information as described above, in 265.

If determination unit 115 determines that the account has been coded to close, but the account has not yet been closed, in 215, determination unit 115 next determines whether the credit card associated with the account is a secured credit card or an unsecured credit card, in 220. For example, a credit card may have been secured by the user having paid a predetermined amount of money, referred to herein as a security deposit, to the credit card company before the credit card was activated by the credit card company. If the credit card is determined to be unsecured after accessing information stored in memory unit 120, in 220, status information is provided to the user via one or more automated messages. In an exemplary embodiment, the status information includes that the account has been coded to be closed and/or information about the reason(s) why the account is not yet closed and what needs to be done or happen for the account to close. For example, an automated message can inform the user that if the account remains at a zero dollar balance, the account will close automatically on a particular date, in 245. The date is calculated by determination unit 115 from the request to close date. Specifically, the date is the date the account was requested to be closed plus a predetermined number of days, for example, thirty days. The date can be calculated in any number of ways and the above calculation is merely

exemplary. Further, in 260, if a refund payment is due,  
response unit 110 provides status information to the user via  
one or more automated messages including the date the user  
should receive the refund payment by and/or the amount of the  
5 refund payment. In an exemplary embodiment, the date is  
calculated by determination unit 115 by adding a predetermined  
number of days to the date the account was coded to close by the  
credit card company and the account had a balance of zero  
dollars. The date can be calculated in variety of other ways as  
well. Further, other information can be provided to the user  
via one or more automated messages as described above, in 265.

If the credit card associated with the inputted account  
number is determined to be secured by determination unit 115  
after accessing information stored in memory unit 120, in 220,  
determination unit 115 then determines whether the request to  
15 close the account was within the last predetermined number of  
days, in 225. For example, a determination is made whether the  
request to close the account was made within the last ten days  
preceding the current account status inquiry by the user. If  
20 the request to close the account was made within the last  
predetermined number of days, in 225, status information is  
provided to the user via one or more automated messages  
including information indicating that the account has been

selected to be closed, the request to close the account was made within the last predetermined number of days and/or that the security deposit has not yet been applied to the account. In addition, the user is informed via an automated message the date the account will automatically close on or by if the account balance remains at zero dollars, in 230. In an exemplary embodiment, the date is calculated by determination unit 115 by adding a predetermined number of days to the date of the request to close the account. The user is also provided via an automated message the date the security deposit will be applied to the account, in 235. For example, the date is calculated by determination unit 115 by adding a predetermined number of days to the date of the request to close the account. In an exemplary embodiment, a security deposit is applied to an account by using some or all of the security deposit to pay off some or all of an outstanding balance of the account.

Further, in 260, if a refund payment is due, response unit 110 provides status information to the user including the date the user should receive the refund payment by and/or the amount of the refund payment. In an exemplary embodiment, the date is calculated by determination unit 115 by adding a predetermined number of days to the date the account was coded to close by the credit card company and the account had a balance of zero

dollars. Further, other information can be provided to the user via one or more automated messages as described above, in 265.

If the request to close the account was not made within the last predetermined number of days, in 225, status information is provided to the user via one or more automated messages

including information indicating that the account has been coded to be closed and/or that the request to close the account was not made within the last predetermined number of days. In

addition, the user is informed via an automated message the date the account will automatically close if the account balance remains at zero dollars, in 250. In an exemplary embodiment,

the date is calculated by determination unit 115 by adding a predetermined number of days to the date of the request to close the account. The user is also informed that the security

deposit has been applied to the balance of the account, in 255.

Further, in 260, if a refund payment is due, response unit 110 provides status information to the user including the date the user should receive the refund payment by and/or the amount of

the refund payment. In an exemplary embodiment, the date is

calculated by determination unit 115 by adding a predetermined

number of days to the date the account was coded to close by the credit card company and the account had a balance of zero

dollars. Further, other information can be provided to the user via one or more automated messages as described above, in 265.

Fig. 3 sets forth an exemplary flow diagram when a balance of a credit card account is greater than zero and a user has requested that the account be closed.

A user, such as one of users 105a...105n shown in Fig. 1, first requests to close a credit card account, for example, by telephoning a credit card company and verbally informing a customer service representative from the credit card company or sending a request to close via mail or via e-mail to the credit card company. Response unit 110 receives information, for example, from a customer service representative, indicating that the user has requested to close the account and stores the information in memory unit 120, in 305, as shown in Fig. 3.

Thereafter, the user again contacts the credit card company, for example, by telephoning the credit card company via a 1(800) number, and inputs an account number associated with the account, for example, using a telephone key pad in order to inquire about the status of the previous request to close the account. Specifically, the user may desire status information regarding whether the account has already been closed, if the account has not been closed, what is the reason or reasons for the account not being closed and how does the user rectify the

reason(s), and/or whether a refund check was or will be sent to the user. In an exemplary embodiment, the status information is provided to the user via response unit 110 using one or more automated messages.

5           Response unit 110 receives information including the account number input by the user, in 310. Determination unit 115 coupled to response unit 110 then determines whether the account is coded to close or has already been closed based on at least the inputted account number associated with the account and information stored in memory unit 120, in 315. If  
10           determination unit 115 determines that the account has been closed, in 315, another determination is made by determination unit 115 whether a refund payment should be sent to the user, in 340. If a refund payment should be sent to the user, response  
15           unit 110 provides status information to the user via one or more automated messages including information indicating that the account has been closed, the date the user should receive the refund payment by and/or the amount of the refund payment, in 345. In an exemplary embodiment, the date is calculated by  
20           determination unit 115 by adding a predetermined number of days, for example, thirty days, to the date the account was coded to close by the credit card company and the account had a balance of zero dollars. The date can be calculated in variety of ways

as well. Further, other information can be provided to the user via one or more automated messages as described above with reference to 265 of Fig. 2, in 360. If a refund payment is not due, in 340, response unit 110 provides status information to the user via one or more automated messages including that the account is closed and other information as described above, in 360.

If determination unit 115 determines that the account has not yet been closed, rather the account has been coded to close, in 315, determination unit 115 next determines whether the credit card associated with the account is a secured credit card or an unsecured credit card, in 320. If the credit card is determined to be unsecured, in 320, status information is provided to the user via one or more automated messages. In an exemplary embodiment, the status information includes that the account has been coded to be closed and/or information about the reason(s) why the account is not yet closed and what needs to be done or happen for the account to close. For example, an automated message can inform the user that in order for the account to close, the account needs to reach a zero dollar balance and complete a monthly billing cycle. Response unit 110 provides to the user via one or more automated messages the account balance and additional information regarding the paying



down of the account balance, in 335. Further, other information can be provided to the user via one or more automated messages as described above, in 360.

If the credit card associated with the inputted account number is determined to be secured by determination unit 115 after accessing information stored in memory unit 120, in 320, determination unit 115 then determines whether the request to close the account was within the last predetermined number of days, in 325. For example, a determination is made whether the request to close the account was made within the last thirty days preceding the current account status inquiry by the user. If the request to close the account was made within the last predetermined number of days, in 325, determination unit 115 then determines whether a security has been applied to the account, in 330. In an exemplary embodiment, determination unit 115 also determines whether a security deposit should be applied to an account and if so, determination unit 115 applies the security deposit to the account.

If a security deposit is determined to have been applied to the account, in 330, status information is provided to the user via one or more automated messages including that the account has been selected to be closed, information about the reason(s) why the account is not yet closed and what needs to be done or

happen for the account to close, and/or that the security deposit has been applied to the account. For example, an automated message can inform the user that in order for the account to close, the account needs to reach a zero dollar balance and complete a monthly billing cycle. Response unit 110 provides to the user via one or more automated messages the account balance and additional information regarding the paying down of the account balance, in 335. Further, other information can be provided to the user via one or more automated messages as described above, in 360.

If a security deposit is determined to not have been applied to the account, in 330, status information is provided to the user via one or more automated messages including that the account has been selected to be closed, information about the reason(s) why the account is not yet closed and what needs to be done or happen for the account to close, and/or that the security deposit has not yet been applied to the account. For example, an automated message can inform the user that in order for the account to close, the account needs to reach a zero dollar balance and complete a monthly billing cycle. Response unit 110 also provides to the user via one or more automated messages that the security deposit will be applied to the account on a particular date, in 355. In an exemplary

embodiment, the particular date is a predetermined number of days after the date of the coded to close request. Moreover, the user is provided via one or more automated messages the account balance and additional information regarding the paying  
5 down of the account balance, in 335. Further, other information can be provided to the user via one or more automated messages as described above, in 360.

10 If determination unit 115 determines that the request to close the account was not made within the last predetermined number of days, in 325, determination unit 115 then determines whether a security has been applied to the account, in 350.

15 If a security deposit is determined to have been applied to the account, in 350, status information is provided to the user via one or more automated messages including that the account has been selected to be closed, information about the reason(s) why the account is not yet closed and what needs to be done or happen for the account to close, and/or that the security deposit has been applied to the account. For example, an automated message can inform the user that in order for the  
20 account to close, the account needs to reach a zero dollar balance and complete a monthly billing cycle. Response unit 110 provides to the user via one or more automated messages the account balance and additional information regarding the paying

down of the account balance, in 335. Further, other information can be provided to the user via one or more automated messages as described above, in 360.

If a security deposit is determined to not have been  
5 applied to the account, in 350, status information is provided to the user via one or more automated messages including that the account has been selected to be closed, information about the reason(s) why the account is not yet closed and what needs to be done or happen for the account to close, and/or that the  
10 security deposit has not yet been applied to the account. For example, an automated message can inform the user that in order for the account to close, the account needs to reach a zero dollar balance and complete a monthly billing cycle. The user is provided via one or more automated messages the account  
15 balance and additional information regarding the paying down of the account balance, in 365. Response unit 110 also provides to the user via an automated message that the security deposit will be applied to the account on a particular date, in 370. In an exemplary embodiment, the particular date is a predetermined  
20 number of days after the date of the coded to close request. Further, other information can be provided to the user via one or more automated messages as described above, in 360.

The embodiments described above are illustrative examples of the present invention and it should not be construed that the present invention is limited to these particular embodiments.

Various changes and modifications may be effected by one skilled

5 in the art without departing from the spirit or scope of the

invention as defined in the appended claims.